

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2003/002071

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04B 7/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04B, H01Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Signals, Systems and Computers, 2001. Conference Record of the Thirty-Fifth Asilomar Conference on pages 517-1524, Vol.2, Banister, B.C, Zeidler, J.R. Implementation of transmit antenna weight adaptation through stochastic gradient feedback, accession no. 7335603 paragraph 2.1	1-7
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A	Wireless Communications, 2001. (SPAWC'01). 2001 IEEE Third Workshop on Signal Processing Advances on pages 314-317, Banister, B.C. , Zeidler, J.R. A stochastic gradient algorithm for transmit antenna weight adaptation with feedback, accession no. 6978015, paragraphs 3.1 and figure 1	1-7
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☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 23 July 2004	Date of mailing of the international search report 27 -07- 2004
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer FREDRIK BLOMQVIST/BS Telephone No. +46 8 782 25 00

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] pages 1156-1171, Vol. 51, Issue 5, Banister, B.C., Zeidler, J.R., A simple gradient sign algorithm for transmit antenna weight adaptation with feedback, accession no. 7579673, paragraph III --	1-7
A	Broadband Communications, 1998. Accessing, Transmission, Networking. Proceedings. 1998 International Zurich Seminar on pages 29-36, Halle, B., Algorithms and VLSI architectures for RLS-based time reference beamforming in mobile communications", accession no. 5991618, paragraphs 2,2.3,4, figure 4 --	1-7
A	EP 1265377 A2 (NEC CORPORATION), 11 December 2002 (11.12.2002), paragraphs [0052-0065], figure 3 --	1-7
A	WO 03077491 A1 (KABUSHIKI KAISHA TOSHIBA), 18 Sept 2003 (18.09.2003), page 14, line 14 - page 23, line 23 -- -----	1-7

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				GB	2386476 A	17/09/2003
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